

UNCLASSIFIED

AD NUMBER
AD824648
NEW LIMITATION CHANGE
TO Approved for public release, distribution unlimited
FROM Distribution authorized to U.S. Gov't. agencies and their contractors; Critical Technology; AUG 1967. Other requests shall be referred to Office of the Assistant Chief of Staff for Force Development [Army], Attn: OT-RD, Washington, DC 20310.
AUTHORITY
Adjutant General's Office [Army] ltr dtd 29 Apr 1980

THIS PAGE IS UNCLASSIFIED

THIS REPORT HAS BEEN DELIMITED
AND CLEARED FOR PUBLIC RELEASE
UNDER DOD DIRECTIVE 5200.20 AND
NO RESTRICTIONS ARE IMPOSED UPON
ITS USE AND DISCLOSURE.

DISTRIBUTION STATEMENT A

APPROVED FOR PUBLIC RELEASE;
DISTRIBUTION UNLIMITED.

AD 824648



IN REPLY REFER TO

18 December 1967

TO: SEE DISTRIBUTION

2. Information contained in this report is provided to insure appropriate benefits in the future from Lessons Learned during current operations, and may be adapted for use in developing training material.

Kenneth G. Nickham

1 Incl
as

Commanding Generals
US Continental Army Command
US Army Combat Developments Command

US Army Command and General Staff College
US Army War College
US Army Air Defense School
US Army Armor School
US Army Artillery and Missile School
US Army Aviation School
US Army Chemical School
US Army Civil Affairs School
US Army Engineer School
US Army Infantry School
US Army Intelligence School
US Army Adjutant General School
US Army Missile and Munitions School
US Army Southeastern Signal School

RECEIVED
JAN 2 1968
B

This document is classified (S) to special export controls and each transmission to foreign governments or foreign nationals may be made only with prior approval of DDP, DDT, DRT, C, S, E, EG
auth: OT-RD
Wash. D. C.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

HEADQUARTERS
815TH ENGINEER BATTALION (CONSTRUCTION)
APO 96318

EGC-815E-CO

9 August 1967

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for
Quarterly Period Ending 30 July 1967.

THRU: Commanding Officer
937th Engineer Group (Combat)
APO 96318

Commanding General
18th Engineer Brigade
ATTN: AVBC-C
APO 96377

Commanding General
United States Army Engineer Command, Vietnam
ATTN: AVCC-PO
APO 96491

Commanding General
United States Army Vietnam
ATTN: AVGC-DH
APO 96307

Commander-in-Chief
United States Army Pacific
ATTN: GPOP-CT
APO 96558

TO: Assistant Chief of Staff for Force Development
Department of the Army (ACFOR DA)
Washington, D.C. 20310

Protective marking CANCELLED
1 January 1969

FOR OT RD FILE
670520

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

EGC-815E-CO

9 August 1967

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for
Quarterly Period Ending 30 July 1967.

SECTION I. SIGNIFICANT UNIT ACTIVITIES

1. COMMAND

a. MISSION:

- (1) To command assigned and attached units.
- (2) To carry out construction missions as directed.
- (3) To operate and secure Connell Quarry, Pleiku, RVN.
- (4) To operate and secure former RMK Facilities, Pleiku, RVN.
- (5) To operate and secure Waterman Quarry, Pleiku, RVN.
- (6) To carry out Operational Support as required.

b. ORGANIZATION:

(1) To accomplish the mission, the following units were assigned or attached to the battalion during the reporting period.

<u>UNIT</u>	<u>TCE</u>
102d Engineer Company (CS)	5-114D
49th Engineer Detachment (WD)	5-500C

(2) A Chart showing the battalion organizational structure is attached as Inclosure 1.

c. COMMAND RELATIONSHIPS: The 815th Engineer Battalion (Construction) is attached to the 937th Engineer Group (Combat) and has a conventional relationship with its parent unit.

2. PERSONNEL ADMINISTRATION, MORALE, AND DISCIPLINE

a. PERSONNEL: The average present for duty strength of the battalion and its attached units remained within the range of 91% to 102%, with an average of approximately 97% during the reporting period.

b. MORALE AND DISCIPLINE:

(1) Morale has increased since the battalion's arrival in country due to the stabilization of the situation and preparation of cantonment facilities in the unit area.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

EGC-815E-CO

9 August 1967

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for
Quarterly Period Ending 30 July 1967.

(2) Disciplinary problems during this period have largely been due to the new situation that the battalion personnel were subjected to upon arrival in RVN. During the reporting period there were one Summary and eight Special Courts-Martial.

(3) Movies are conducted each night in a central location in the battalion area, weather permitting. Central Camp Officer, NCO, and EM Clubs have been established.

(4) During the reporting period there have been two Protestant and one Catholic service each Sunday in the base camp. Jewish personnel and those of other religious sects have been provided information and the privilege of attending their own services when available. A Weekly Protestant Bible study class has been conducted one evening a week for those personnel interested.

3. INTELLIGENCE AND COUNTERINTELLIGENCE

The battalion has continued processing of the required personnel security clearances during the reporting period. Daily contact is made with S-2 Section 937th Engineer Group (Combat) for current local intelligence data. Spot reports have been submitted on all verified and possible enemy contacts.

4. PLANS, OPERATIONS AND TRAINING

a. GENERAL:

(1) The battalion was formed on 1 Feb 1966, underwent its unit training phase from August 1966 through November 1966, and moved from Fort Belvoir, Virginia on 23 March 1967 and arrived in country on 14 April 1967. Primary problem areas encountered in conducting the unit movement were a lack of complete information concerning marking, parking, and recording procedures, confusion as to allowable quantities of CAT with the main body and advance party; and lack of sufficient guidance concerning size, composition, and function of the unit advance party. Additionally it is felt that any guidance which could be made available to the deploying unit from its sponsoring unit in country would be of great value and the dispatch of such information should be expedited. In the case of this unit no such information was received.

A basic problem area encountered in unit activation and preparation for overseas movement was the fact that the lower grade EM filler personnel were assigned to the unit prior to assignment of experienced NCO's and officers. Such an assignment policy gives the unit an initial leadership gap providing problems throughout its unit training phase and preparation for overseas movement. An additional burden was added in that a substantial number of these EM were train and retain (TRAPP) personnel.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

EGC-815E-CO

9 August 1967

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for
Quarterly Period Ending 30 July 1967.

A newly activated unit preparing for overseas movement has neither time nor adequate facilities to train assigned personnel in their basic skills.

(2) Since its arrival in country the unit has engaged in a number of construction projects in the Pleiku vicinity as well as providing personnel and equipment support to combat battalions of the group engaged in operational support missions.

(3) This unit received two crusher complexes from the RMK-BRJ. One plant, a 225 ton per hour Pettibone plant consisting of a jaw primary, a roll jaw secondary, one hopper and three conveyors were set up in the CIA yard. This plant was in a state of disrepair, and experience thus far has shown this unit to be a maintenance nightmare. The roll jaw unit has been removed from the line and the present plans call for utilization of only the primary jaw crusher, set at 3". The second plant, also a Pettibone, had recently been procured by RMK-BRJ and was turned over, prior to use, completely disassembled without manufacturer's catalogs or plans. This plant consists of a feed chain; primary jaw; two-deck screen and 10-51 hydrocone; 4-51 hydrocone; feed hopper; two deck screen roll, jaw and rotary elevator; 3 deck screening unit; 4 hoppers and 10 conveyors. Many components and assemblies were missing when this equipment was received. Extensive research and design work was performed prior to the assembly of this complex. It was realized at the time that this was a duplication of effort previously expended; however, the design plans were not available and it was imperative to place this equipment in use at the earliest possible time. During the design phase, the feed chain and primary jaw were placed in operation adjacent to Camp Holloway and crushed rock procured by contract. Work was immediately initiated at the Connell Quarry preparing the haul roads, stripping overburden, opening the drainage ditch which would also be the face, and site preparation for the crusher complex. Critical dates were established, based on exhausting the contract rock supply. Plant configuration was established and concrete pads were placed for all major items. The electrical design proved to be the most difficult phase due to the constant changes required, caused by lack of required material and the necessity of utilizing material which could be obtained. The complete plant has an electrical load motor at 135 KW. Utilizing the power factor allows us to run the plant on the only generator available, a 100 KW; however, this is not a desirable solution. The equipment began moving onto the site on 7 June 1967 and security was established. All components, less the 4-51 hydrocone, were on site on 31 July 1967 and the plant became operational. The hydrocone required a special oil which proved very difficult to obtain in country. The oil arrived on 25 July 1967, and 5 days later the system was tested out and placed on line.

Best Available Copy

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

EGC-815E-CO

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for
Quarterly Period Ending 30 July 1967.

Primary problems on site are; lack of electrical generators, manuals and repair parts, the manpower drain required to secure the operation and the difficulty of removing blast rock (rock lens is presently 4 feet thick covered with 4 to 6 feet of overburden, underlaid by a blue clay depth undetermined with a hydrostatic water pressure caused by surrounding rice paddies.)

(4) Commitment of the battalion's critical equipment to operational support missions ~~limits~~ its earthmoving capabilities on assigned projects. Inherent in the nature of such missions is the fact that equipment is run hard for long periods with minimum maintenance resulting in additional down time for maintenance upon return of the equipment.

(5) The 49th Engineer Detachment (WD) was attached to the battalion on 13 June 1967. Unit personnel arrived ahead of their assigned equipment. Upon learning that their training was extremely limited they were attached to a well drilling detachment of the 35th Engineer Group to gain practical experience on the job. Upon returning to this unit it is anticipated that their increased experience will be put to good use.

b. OPERATIONAL SUPPORT:

This unit has been assigned no direct operational support missions but has provided substantial personnel and equipment support to combat battalions engaged in operational support missions. The heaviest commitments of this type were initially to support the 20th Engineer Battalion during operation FRANCIS MARION during April and May of 1967 and then to support the 299th Engineer Battalion during operation GREEELY during July 1967. Support provided to the 20th Engineer Battalion on operation FRANCIS MARION consisted of attaching one complete Earth moving Platoon and a small amount of additional equipment to work on roads in the vicinity of Duc Co. Support provided to the 299th Engineer Battalion during operation GREEELY consisted mainly of attachment of selected items of equipment with operators. Other similar commitments of lesser magnitude have been continuous throughout the period.

c. CONSTRUCTION:

Since arrival in country the following projects have been assigned to the battalion:

(1) Construction and operation of the Connell Quarry. Since assignment of the job the access road has been shaped, compacted, and improved. Reinforced concrete slabs for all crusher units have been placed and all crusher units have been located on site.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

EOC-815E-CO

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for
Quarterly Period Ending 30 July 1967.

A crusher headwall was constructed, an operations/mess building and a maintenance building were constructed. Bunkers, towers and a triple concertina security fence have been placed. Additional bunkers and towers are currently being placed. Security lighting and the permanent electrical hookup remain to be installed.

(2) A seventy pad Christmas Tree Heliport is under construction at Camp Holloway. The bulk of the earthwork has been completed with more than 230,000 cu yd of earth moved. The greater part of the heliport is within one foot of grade. Weather has currently been the limiting factor in completing the earthwork due to heavy monsoon rains. The final earthwork must be completed, as asphalt seal coat placed, and M&I matting placed.

(3) The minimum essential cantonment requirements to support the Christmas Tree Heliport now under construction at Camp Holloway are partially completed. To date, three latrines have been completed. A 40' x 100' mess hall and two showers are under construction.

(4) A 50,000 Barrel Tank Farm is under construction. The basic earthwork has been completed to include an access road. Currently rock is being placed on the tank pads. The major part of the required materials have not yet been received.

(5) Roads in the 71st Evacuation Hospital have been brought to grade, shaped, and compacted. Aggregate is currently being placed for a base course in preparation for paving as soon as weather permits.

(6) In the Log Depot area two 40'x100' and two 40'x200' Pasco buildings are currently under construction with one 40'x200' completed. An additional eleven 40'x100' buildings are scheduled to be constructed. Nine 1600 cubic foot refrigerators with sheds have been assembled. A continuing effort to maintain roads and establish hardstands is under way.

(7) Two 500 Man Mess Halls which were under construction by RMK-BRJ were turned over to the battalion for completion. As much work as was possible utilizing all available materials was completed. One Mess Hall (526th Replacement Company) was finished to the stage that it is currently in use. The other (52d Artillery Group) still needs considerable finishing work.

(8) A dust proof van entrance and connecting corridor were completed for the 330th Radio Research Company.

6

FOR OFFICIAL USE ONLY

9

FOR OFFICIAL USE ONLY

EGC-815E-CO

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for
Quarterly Period Ending 30 July 1967.

(9) In the 526th Replacement Company area two 20'x100' two-story barracks and one 20'x100' single story supply building have been completed and are in use. The shell of two 40'x100' buildings have also been completed minus electrical work. Work on access roads and handstands has been deferred until dry weather and availability of equipment allows.

(10) The US Army Communications Center, Pleiku, was constructed by RMK-BRJ and turned over to the battalion to complete installation of electrical and plumbing systems and install an air conditioning system. To date the slabs for the air conditioning units have been placed. Additional materials are required to complete the job.

(11) Two additional paving jobs are under study for future construction. These include paving of the roads in the 18th Surgical Hospital Area and paving of selected roads in the USAF Munitions Area.

(12) The battalion is currently engaged in preparation of an advanced CP for Hqs 1st Field Forces (Vietnam). To date four trailers have been installed with water, gas, sewage, and electrical distribution, and a temporary Tactical Operations Center prepared. Fourteen tent kits and sufficient concealing to protect the area have been issued for self help erection. At this time a 40' x 56' Tactical Operations Center is under construction as well as minimum essential shower and latrine facilities.

(13) The battalion is also engaged in a large self help construction mission for the entire Engineer Hill Camp. To date eight latrines, eight showers, three mess halls, and nine barracks have been completed. Nineteen other structures are under construction.

(14) Minimum essential cantonment requirements for the 62d Maintenance Battalion are presently under study. Plans and bills of materials are being prepared.

(15) Lines of communications maintenance continues to require an increasing level of engineer effort. With the existing weather situation and the extremely high volume of traffic in the Pleiku area a constant effort must be exerted to merely keep the roads trafficable. In addition to the current maintenance program a future Lines of Communications upgrading program is being developed for those routes in the unit's area of responsibility.

5. LOGISTICS:

a. The battalion S-4 Section acted as the principal staff supervising agency of the logistical preparation of the unit for overseas movement.

7

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

EGC-815E-CO

9 August 1967

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for
Quarterly Period Ending 30 July 1967.

They provided the companies with all guidance on packing and crating, marking, documentation, and division of items into the various shipping categories i.e. Red and Yellow TAT and main equipment shipment.

b. Upon its arrival in country the battalion assumed responsibility for the bulk of the RMK assets in Pleiku. These included Construction Industrial Area (old RMK yard), located adjacent to Pleiku AFB and numerous items of construction equipment (i.e., asphalt plant, concrete batch plant, concrete transit mix trucks, miscellaneous earthmoving and compaction equipment, generators, pump, etc). The vast majority of this equipment is worn out requiring an extensive maintenance program. The S-4 Section is currently operating two construction supply yards and a Prefabrication shop engaged in preparing standard trusses, panels, etc.

c. Since arrival in country the S-4 Section has handled an extremely large volume of construction supplies. Without the fork lift obtained from RMK assets, this unit would not have been able to keep abreast of off loading the supplies delivered.

d. Maintenance. The battalion's maintenance program has been quite successful as attested to by the fact that the deadline rate currently varies from 5 to 10 percent for critical items, and from 2.5 to 5 percent overall. This is attributed to an aggressive maintenance program in each company plus a strong organic direct support shop in A Company. An added factor is the battalion's policy of retaining one sixth of the unit's equipment in the area for organizational maintenance each day until serviced. In this manner, each item is thoroughly checked once a week and minor deficiencies are corrected before they become serious. At this time "A" Company has two maintenance sheds and the construction companies are in the process of constructing sheds. All company motor pools have been either completely or partially stabilized and have had adequate drainage established. The local DSU, the 62d Maintenance Battalion, has done an excellent job of supporting the battalion. The only significant shortage of spare parts has been for the unit's Clark 290 M wheeled tractors.

6. FORCE DEVELOPMENT: None

7. COMMAND MANAGEMENT: None

8. INSPECTOR GENERAL: None

9. INFORMATION: A vigorous public information program has been initiated since the battalion's arrival in country. Hometown releases have been submitted on all promotions, reenlistments, awards, and any items of unique interest which occur.

FOR OFFICIAL USE ONLY

11

FOR OFFICIAL USE ONLY

EGC-815E-CO

9 August 1967

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for
Quarterly Period Ending 30 July 1967.

10. CIVIC AFFAIRS: Since the unit's arrival in country several civic action projects have been undertaken. Initially battalion personnel began working at the local Orphanage during their half day off. A roof extension was constructed and drainage ditches were dug to improve the area's drainage. All Protestant Chapel offerings during the months of April and May were donated to the Fleiku Leprosarium operated by the Christian Missionary Alliance. Future plans include construction of an access road to the new Leprosarium site.

9

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

EGC-815E-CO

9 August 1967

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for
Quarterly Period Ending 30 July 1967.

SECTION II, PART I, OBSERVATIONS (LESSONS LEARNED)

1. PERSONNEL, ADMINISTRATION, MORALE, AND DISCIPLINE

ITEM: Preparation of publications packets for issue to newly activated/
deployed units.

DISCUSSION: As a newly activated unit, this battalion experienced great difficulty in obtaining its required publications. A similar problem was encountered upon arrival in country. Initially in CONUS the procedure required was for the unit to establish an account, submit requisitions for all required publications, and to submit follow up action on all publications not delivered. It is felt that packets of required publications could be prepared and issued to newly activated units upon their activation. Additionally such packets could be made up with all required local publications in RVN and issued to newly arrived units. In both cases a great deal of time would be saved and the unit would be able to carry out its functions sooner and more completely.

OBSERVATION: Pre-prepared packets of required publications should be issued to newly activated/deployed units.

ITEM: Deferment of personnel from overseas movement.

DISCUSSION: Upon movement of the battalion from Fort Belvoir, approximately 30 EM were deferred from overseas movement because of personnel actions in process. These personnel remained assigned to the battalion but were attached to other units at Fort Belvoir. After four months in country only two of these personnel have rejoined the unit and two others have been reassigned. One other individual was diverted to another unit in country, yet is still assigned to this battalion. This has resulted in complete confusion within the unit as to the exact status of these personnel and a lack of required personnel within the unit.

OBSERVATION: Personnel who are indefinitely deferred from a deploying unit should be reassigned and deployable personnel should be assigned to fill their vacancies prior to the movement of the unit overseas.

2. OPERATIONS

ITEM: Mounting of the skid mounted earth auger on a 5 Ton Tractor.

10

FOR OFFICIAL USE ONLY Best Available Copy

FOR OFFICIAL USE ONLY

EGC-815E-CO

9 August 1967

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for
Quarterly Period Ending 30 July 1967.

DISCUSSION: With the limited number of 2½ Ton trucks available within the construction battalion and the many requirements for such vehicles for both hauling personnel and cargo, it was decided to mount the skid mounted earth auger on a 5 Ton Tractor rather than a 2½ Ton truck. In order to accomplish the mounting the fifth wheel assembly and deck plate were removed. Three 4x6 timbers were evenly spaced on the rear tractor frame and the auger skids were bolted to the frame around the 4x6's with the use of "U" bolts. Rear wheel fenders were fabricated from sections of corrugated metal pipe and steel pickets in order to protect the auger from dirt and mud thrown up by the tires. Spare bits are carried chained to the fenders.

OBSERVATION: Mounting of the skid mounted earth auger on a 5 Ton Tractor has proved to be very satisfactory under frequent usage.

ITEM: Preliminary/Hasty Construction Project Scheduling.

DISCUSSION: Difficulties are often encountered in preliminary or hasty scheduling of construction projects. Many such projects are initially assigned with minimal plans and specifications provided and an immediate starting time directed. Due to the accuracy required by the accepted format for construction scheduling, the extensive analysis required is neither feasible nor practical. Often a workable project schedule can be developed by scheduling job activities in blocks of man days rather than man hours. The CPM program should be roughed out to indicate sequence only while the bar graph schedule can show approximate duration of each job component by working day rather than calendar day. Hasty scheduling will suffice for initial planning. At a later date the entire schedule can be refined as more information is received and more time becomes available. A complete, accurate, and detailed schedule will then be available for detailed planning purposes at all levels.

OBSERVATION: Detailed construction schedules should not be immediately required on projects which are assigned on short notice and with minimal information. Hasty schedules should be initially developed and followed up with more detailed information as available.

3. LOGISTICS

ITEM: Acquiring "O" rings for engineer equipment.

//

FOR OFFICIAL USE ONLY

15

FOR OFFICIAL USE ONLY

ETC-815E-CO

9 August 1967

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for
Quarterly Period Ending 30 July 1967.

DISCUSSION: This unit has encountered difficulties in obtaining required "O" rings or materials for fabrication of "O" rings for items of engineer equipment such as Clark 290 M Wheeled Tractors. An acceptable source has been located in USAF and US Army Aviation units in the area. "O" rings and fabrication materials used by such units becomes unserviceable after a certain time period for aviation use, however these rings and material can be used on engineer equipment.

OBSERVATION: "O" rings and "O" ring fabrication material for engineer equipment can be obtained from aviation units if not available through normal supply sources.

ITEM: Replacement of rigid fuel lines on Clark 290 M Tractor and Caterpillar D7E Tractor.

DISCUSSION: This unit has experienced a number of breakdowns on Clark 290 M and Cat D7E Tractors due to rigid fuel line breakage. In almost all cases the lines are of steel tube construction, and in most cases with the exception of the main high pressure line of the Clark 290 M, the breakage occurs on the low pressure side of the system. It has been found that replacement of steel lines with more flexible seamless copper tubing substantially reduces breakage. Copper tubing should only be used on low pressure components unless the required thick wall seamless copper tubing of required pressure strength can be obtained. If at all possible the main high pressure line from the pump to the injectors on the Clark 290 M should be replaced with a flexible line.

OBSERVATION: Units should make an attempt to obtain a good supply of copper tubing of various sizes to cover the breakage of rigid lines caused by operation over rough terrain.

ITEM: Servicing of the Aneroid Control Assembly of the Clark 290 M Wheeled Tractor.

DISCUSSION: A Clark 290 M Tractor of this battalion became inoperable due to fuel loss. After a protracted period of checking unit maintenance personnel concluded that the pump was defective and must be replaced. As a last resort prior to removing the pump the aneroid control assembly was removed and serviced even though hours of operation were far less than required for servicing. After servicing, the assembly was replaced and the tractor operated with no more problems.

12

FOR OFFICIAL USE ONLY

16

FOR OFFICIAL USE ONLY

EGC-815E-CO

9 August 1967

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for
Quarterly Period Ending 30 July 1967.

OBSERVATION: In extremely dusty conditions the aneroid control assembly should be completely serviced at the reduced interval of 125 hours of operation and the air filter cleaned and checked at least every 50 hours of operation.

ITEM: Winch Malfunction.

DISCUSSION: A winch which was inadvertently engaged damaged itself and the bumper of the 5 Ton truck to which it was attached. Ordinarily, such damage should have been prevented by the winch shear pin, which should have broken. Investigation revealed that the pin had not sheared since the power take off shaft from the truck had been frozen by rust into the collar of the winch shaft. It is believed that this occurred on the ship during overseas movement. Other winches were found to be similarly rusted.

OBSERVATION: All winches should be removed after ocean shipment, the shaft and collar should be separated and coated with oil or grease.

ITEM: Consolidated packing of vehicular air hoses and electrical lines.

DISCUSSION: After transporting equipment to port for overseas shipment all intermediate brake and light lines were taken from tractor trailers and boxed for consolidated shipment. This box was then shipped on a different ship than the tractor trailers. This resulted in a number of difficulties and delays upon arrival in country.

OBSERVATION: Air brakes and electrical lines should be packed on the equipment from which removed when prepared for overseas movement.

ITEM: Use of qualified operators during off loading of engineer equipment.

DISCUSSION: Transportation Corps personnel involved in off loading equipment for this unit assumed that they were responsible for removing the equipment from the pier before the unit took charge of it. Personnel moving the engineer equipment off the pier were not qualified operators and caused damage to the equipment through ignorance.

OBSERVATION: If practicable, equipment should not be off-loaded until sufficient qualified operators are available from the unit and the unit should require that only such operators should be allowed to operate the equipment.

13

FOR OFFICIAL USE ONLY

17

FOR OFFICIAL USE ONLY

EGC-815E-CO

9 August 1967

SUBJECT: Operational Report - Lessons Learned (PCS CSFOR-65) for
Quarterly Period Ending 30 July 1967.

ITEM: Establishment of a Loading Team at Company Level.

DISCUSSION: During a unit's preparation for overseas movement, a large volume of administrative work and planning must be carried out, all of which is directly associated with loading and movement. It was found that for continuity of knowledge and maximum efficiency a unit loading team should be established in each company. This team should consist as a minimum of one officer, one non-commissioned officer, and one clerk. These personnel should have the coordination and preparation for the unit packing, crating, movement, and associated documentation as their primary duty. Such a team would reduce confusion and maximize efficiency on both ends of the movement.

OBSERVATION: Unit loading teams should be established at company level with a primary duty of preparation for overseas movement.

ITEM: Procurement of small lightweight items of construction supplies.

DISCUSSION: Difficulty has been experienced in obtaining small lightweight items of construction supplies i.e. electrical supplies, small plumbing supplies, etc. This unit requires numerous items that are critically needed to complete construction projects currently assigned. Thusfar the only way to alleviate such shortages has been to send organic transportation to Qui Nhon to transport these specific items to the Sub-Supply Depot as required.

OBSERVATION: It is suggested that all Stock Control Units be given an ASL and a re-order point which when reached would automatically necessitate the re-ordering of such items.

ITEM: Clearing of Installation Properly.

DISCUSSION: A unit preparing for overseas movement may require considerable work to clear the installation to which assigned in CONUS. Resulting confusion, inaccuracies, and problems could be minimized if the installation would perform the audit of the installation property book one month prior to the unit's actual departure date. In this manner all inventory adjustments, reports of survey, or turn-ins of excess equipment can be performed prior to departure of the main body.

OBSERVATION: It is suggested that CONUS installations perform the required audit one month prior to unit movement.

14

FOR OFFICIAL USE ONLY

18

FOR OFFICIAL USE ONLY

EGC-815E-CO

9 August 1967

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR065) for
Quarterly Period Ending 30 July 1967.

ITEM: Accuracy of packing lists.

DISCUSSION: All containers, packages, or items prepared for overseas movement are required to be accompanied by a packing list. Such packing lists should be made up in detail and with the highest degree of accuracy possible. Preparation of accurate and complete packing lists will preclude many difficulties as to exact disposition and location of specific items upon arrival in country.

OBSERVATION: The necessity of preparation of complete and accurate packing lists should be stressed throughout a unit's preparation for overseas movement and that such lists should be prepared in enough copies to insure retention at platoon, company, and battalion level.

15

FOR OFFICIAL USE ONLY

19
FOR OFFICIAL USE ONLY

EGC-815E-CO

9 August 1967

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for
Quarterly Period Ending 30 July 1967.

SECTION II, PART II, RECOMMENDATIONS

1. **PERSONNEL:** It is strongly recommended that in newly activated units initial assignments be made of the basic officer and non-commissioned officer personnel required in the unit followed by the lower grade EM required. Such assignment would allow a coherent scheme of organization and preparation for unit training to be followed. It is further suggested that all personnel to be assigned to a known deploying unit be screened prior to assignment to insure that they are in a deployable status.

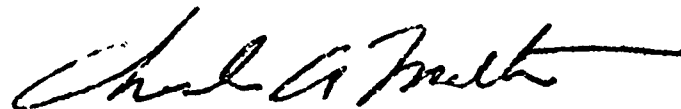
2. **OPERATIONS:** None

3. **TRAINING AND ORGANIZATION:** None

4. **INTELLIGENCE:** None

5. **LOGISTICS:** Construction units in RVN are all engaged in substantial construction programs requiring delivery of very large quantities of building materials. Except for 20 Ton Truck Mounted Cranes (required for construction tasks) and 5 Ton Wreckers (required for maintenance tasks) there is no materials handling equipment organic to the unit available for loading and off loading of such supplies. It is recommended that a minimum of two fork lifts be added to the TO&E of the construction battalion for this purpose.

6. **OTHER:** None



CHARLES A. MELTON
LTC CE
Commanding

1 Incl
as

DISTRIBUTION:

- 3 - CO, 937th Engineer Group (Cbt), ATTN: EGC-3, APO 96318
- 3 - CG, 18th Engineer Brigade ATTN: AVBC-C, APO 96377
- 3 - CG, US Army Engineer Command (Prov), Vietnam, ATTN: AVCC-BC, APO 96491
- 3- CG, USARV, ATTN: AVC-DDE, APO 96307
- 2- CINCUSARPAC, ATTN: GPOP-MH, APO 96558 (Air Mail)
- 2 - CINCUSARPAC, ATTN: GPOP-OT, APO 96558 (Air Mail)
- 1 - Copy File
- 10 - Extra

FOR OFFICIAL USE ONLY

21
EGC-CO (9 Aug 67) 1st Ind
SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for Quarterly
Period Ending 31 July 1967

DEPARTMENT OF THE ARMY, HEADQUARTERS, 937th Engineer Group (Combat), APO
96318 13 August 1967

TO: Commanding General, 18th Engineer Brigade, ATTN: AVHC-C, APO 96377

1. The subject report, submitted by the 815th Engineer Battalion (Construction) has been reviewed and is considered an accurate report of organizational activities.
2. I concur in the observations and recommendations of the Battalion Commander.

s/ R. C. Marshall
t/ R. C. MARSHALL
Colonel, CE
Commanding

22

AVFG-C (9 Aug 67) 2nd Ind Lt Hegmann/cky/DBT-163
SUBJECT: Operational Report - Lessons Learned for the Quarterly Period
Ending 31 July 1967

Headquarters, 18th Engineer Brigade, APO US Forces 96377 28 August 1967

TO: Commanding General, US Army Engineer Command, Vietnam (Prov), ATTN:
AVCC-P&O, APO US Forces 96491

1. This headquarters has reviewed the report submitted by the 815th Engineer Battalion and considers it an excellent report of unit activities and accomplishments for the period ending 31 July 1967.

2. This headquarters concurs with the observations and recommendations of the Battalion Commander with the following additional comments:

a. Section II, part I, paragraph 1 - The concept of publications packets being issued to new units is well taken. USARV packets are available, however, some administrative delay has been experienced in units receiving them. Concur with the observation pertaining to deferment of personnel from overseas movement.

b. Section II, part II, paragraph 5 - Action is being taken to obtain two each forklifts for each combat battalion.

t/HAROLD J. ST CLAIR
Colonel, CE
Commanding

23
AVCC-P&O (9 Aug 67) 3rd Ind CPT Rowley/wvo/LBN 4581
SUBJECT: Operational Report-Lessons Learned for Period Ending 31 July 1967

HEADQUARTERS, UNITED STATES ARMY ENGINEER COMMAND VIETNAM (PROV), APO 96491

TO: Commanding General, United States Army Vietnam, ATTN: AVHGC-DN,
APO 96375

This headquarters concurs with the 815th Engineer Battalion ORLL report as written, subject to the following comments:

a. Reference Section I, para 4a(3): Concur. A complete set of operator and parts manuals for the crusher were acquired from RMK and forwarded to the unit. 1st Logistical Command has plans to acquire a contract repair parts depot and negotiate a maintenance contract for non-standard equipment. This should be operable in 4-6 months. The above actions, plus increasing operators experience, should reduce maintenance problems.

b. Reference Section II, part I, para 1, Item 1: Concur with 2nd Indorsement.

c. Reference Section II, part II, para 5: Concur with 2d Indorsement. An emergency MTOE was submitted to USARV G3 for 10,000 lbs rough terrain forklifts to be issued one per combat battalion and two per construction battalion on 5 August 1967. Informal coordination with USARV G4 indicated that these forklifts will be issued against this emergency MTOE approval. These forklifts will give each battalion an increased construction handling capability.

FOR THE COMMANDER:

Info cys furn:

CG, 8th US Army, ATTN: Engr
CG; 18th Engr Bde
CO, 937th Engr Gp
CO, 815th Engr Bn

t/PAUL A. LOOP
Colonel, CE
Chief of Staff

24

FOR OFFICIAL USE ONLY

AVHGC-DST (9 Aug 67) 4th Ind
SUBJECT: Operational Report-Lessons Learned for the Period Ending
31 July 1967 (RCS CSFOR-65) (U)

HEADQUARTERS, UNITED STATES ARMY VIETNAM, APO San Francisco 96375

TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-OT,
APO 96558

1. (U) This headquarters has reviewed the Operational Report-Lessons Learned for the period ending 31 July 1967 from Headquarters, 815th Engineer Battalion (Construction) (DELA) as indorsed.

2. (FOUO) Pertinent comments follow:

a. Reference item concerning assignment of officer and NCO personnel, section I, part I, paragraph 4a(1). Concur in the assignment of officer and NCO personnel to a newly activated unit prior to assignment of lower grade enlisted personnel. No action can be taken by this headquarters to correct this situation.

b. Reference item concerning publications packets for issue to newly activated/deployed units, section I, part I, paragraph 1 and 2d Indorsement, paragraph 2a. It is impractical to issue prepared packets of Army regulations, circulars, pamphlets, etc., to newly activated units. Complete packets of these directives would be vast and would create problems at the unit level in sorting out the regulations actually needed. Pre-prepared packets of USARV and pertinent MACV directives were furnished the 815th Engineer Battalion on 26 January 1967 by mail, registry number 13604.

c. Reference item concerning deferment of personnel from overseas movement, section II, part I, paragraph 1 and section II, part II, paragraph 1. Nonconcur with the second part of the recommendation pertaining to personnel deferred from deployment. In effect, POR processing already screens personnel to insure they are deployable. The types of circumstances which result in deferments cannot always be forecast at the time of an individual's assignment to a deploying unit. Further, instances will arise right up to the moment of deployment which may result in a deferment. The status of personnel who remain attached to units at the station from which the parent unit deployed should be maintained by furnishing copies of orders pertaining to any change in status to the parent unit. If no orders are received after a reasonable period of time the parent unit in-country must query the unit of attachment for a determination of present status. The

FOR OFFICIAL USE ONLY

25

FOR OFFICIAL USE ONLY

AVHGC-DST (9 Aug 67) 4th Ind
SUBJECT: Operational Report-Lessons Learned for the Period Ending
31 July 1967 (RCS CSFOR-65) (U)

following actions will be taken by this headquarters on the one individual who was diverted in-country and the twenty-five whose present status is not known:

(1) The name, grade, service number, and present location (if known) of the man diverted will be obtained from the 815th Engineer Battalion and action taken to have him transferred to the proper unit.

(2) The 815th Engineer Battalion will be directed to determine the present status of the twenty-five remaining men by requesting information from Fort Belvoir. The battalion will be further instructed to furnish this headquarters the name, grade, service number and port call date of those reported as shipped by Fort Belvoir. We will then initiate a request for location from the replacement battalion. For those personnel reported as being reassigned in CONUS, the 815th Engineer Battalion will be instructed to submit an emergency requisition for replacements.

3. (U) A copy of this indorsement will be furnished to the reporting unit through channels.

FOR THE COMMANDER:

1 Incl
nc

J. M. Munn, Lt
for the commander

cc: HQ, 815th Engr Bn (Const)
HQ, US Army Engr Comd

21

FOR OFFICIAL USE ONLY

GPOP-DT (9 Aug 67)

5th Ind

26

SUBJECT: Operational Rpt for the Quarterly Period Ending 31 July 1967
from HQ, 815th Engineer Battalion (UIC: WDE1AA) (RCS CSFOR-65)

HQ, US ARMY, PACIFIC, APO San Francisco 96558

1 DEC 1967

TO: Assistant Chief of Staff for Force Development, Department of the
Army, Washington, D. C. 20310

This headquarters has evaluated subject report and forwarding indorse-
ments and concurs in the report as indorsed.

FOR THE COMMANDER IN CHIEF:

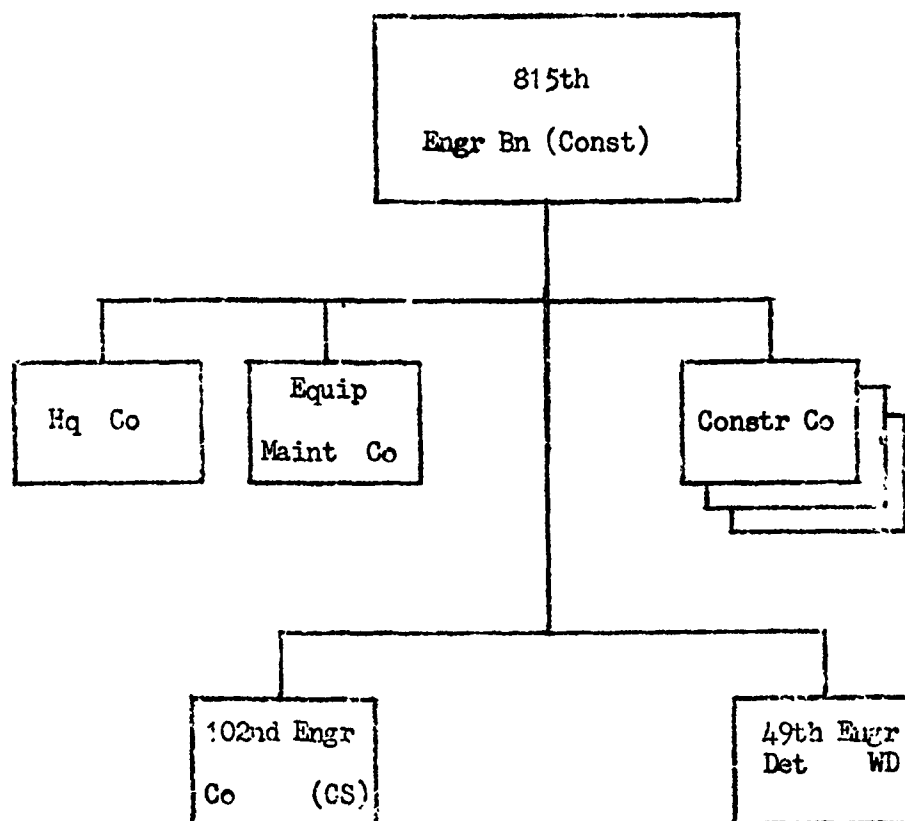


1 Incl
nc

HEAVRIN SNYDER
CPT, AGC
Asst AG

27

815th ENGINEER BATTALION (CONSTRUCTION)
Organizational Chart



23

Incl 1

UNCLASSIFIED

Security Classification

DOCUMENT CONTROL DATA - R & D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author)

OACSFOR, DA, Washington, D.C. 20310

2a. REPORT SECURITY CLASSIFICATION

For Official Use Only

2b. GROUP

Cancelled-1 Jan 69

3. REPORT TITLE

Operational Report-Lessons Learned, Headquarters, 815th Engineer Battalion (Const)

4. DESCRIPTIVE NOTES (Type of report and inclusive dates)

Experiences of unit engaged counterinsurgency operations 1 May - 31 July 1967

5. AUTHOR(S) (First name, middle initial, last name)

CO, 815th Engineer Battalion (Const)

6. REPORT DATE

9 August 1967

7a. TOTAL NO. OF PAGES

24

7b. NO. OF REFS

8a. CONTRACT OR GRANT NO.

b. PROJECT NO.

c.

N/A

d.

9a. ORIGINATOR'S REPORT NUMBER(S)

670520

9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)

10. DISTRIBUTION STATEMENT

11. SUPPLEMENTARY NOTES

N/A

12. SPONSORING MILITARY ACTIVITY

OACSFOR, DA, Washington, D. C. 20310

13. ABSTRACT

24

DD FORM 1473
1 NOV 65

UNCLASSIFIED

Security Classification